



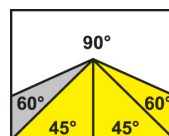
Pilous

Železná 9, 619 00 Brno, Czech Republic

Tel.: +420 543 25 20 10

e-mail: metal@pilous.cz, www.pilous.cz

ARG 300 plus F



3150 x 27 x 0,9

	90°	-45°	+45°	+60°
●	300	220	240	155
■	290	195	225	150
■	375 x 190	240 x 100	240 x 160	150 x 150

Main motor	400 V, 50 Hz, 2,2 kW
Pump motor	400 V, 50 Hz, 0,05 kW
Saw blade speed	15 – 90 m/min.
Working height of vice	910 mm
Coolant tank	cca 15 l
Machine dimensions (min.)	1740 x 950 x 1560 mm
Machine dimensions (max.)	2180 x 1870 x 2050 mm
Machine weight	625 kg

DESCRIPTION

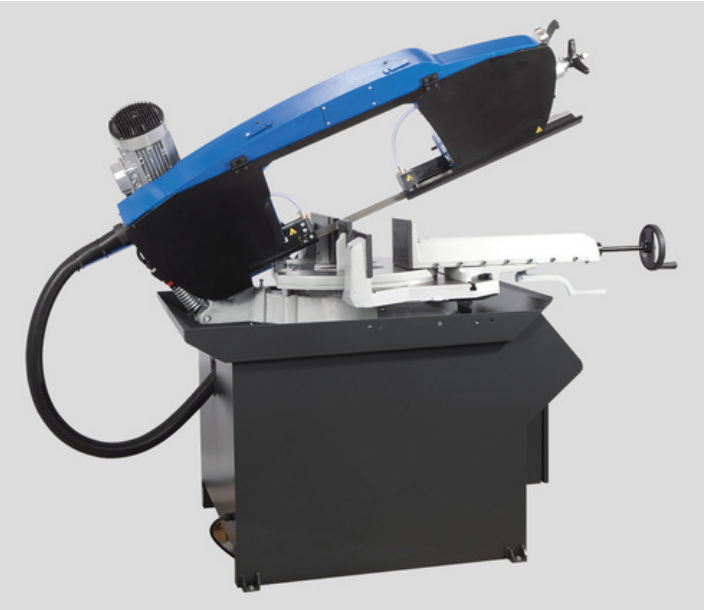
A new unique design. An upgraded version of the legendary ARG 300 model series, manufactured for over 20 years, with a completely new saw blade arm.

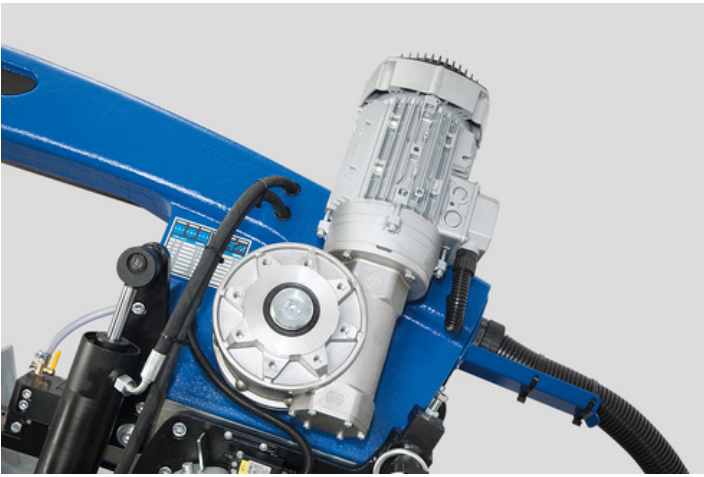
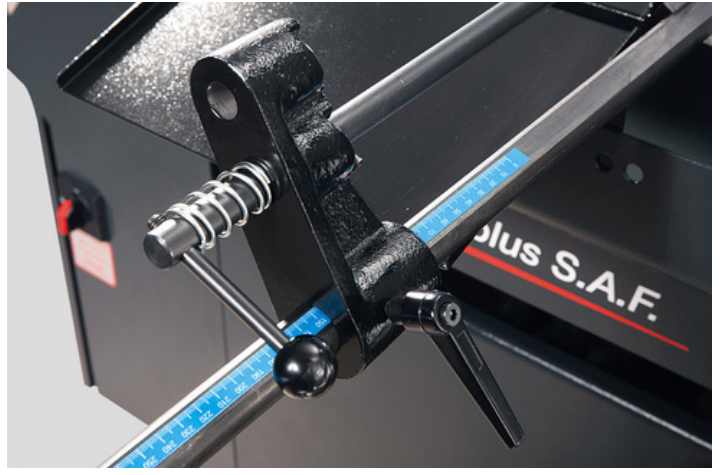
The most up to date concept of the cast iron arm creates a closed section that is hollow along its full length at all load-carrying points. This guarantees outstanding stiffness of the entire system, maximum accuracy during cutting and a long service life of the saw blade. All of electrical wiring and coolant distribution are concealed in hollow parts of the arm, which means they are protected from damage. The new concept of the arm also brings a great simplification when changing the saw band or when cleaning the inside of the arm. You just need to open the hinged back cover of the arm and it will stay locked in the upper position. Apart from the new saw arm design, there are many technological adjustments that improve user comfort as well as the quality and durability of the machine.

The band saw arm uplift is manual; the feed into cut is carried out by the weight of the arm, with the possibility of continuous regulation by the oil damper butterfly valve. When the cut is finished the band saw drive automatically switches off. To facilitate easy arm uplift the machine is equipped with adjustable tension springs that allow for setting of optimum force required for the arm uplift according to characteristics of the material to be cut. Vice system contributes to versatility of use by providing bilateral continuous setting of the cutting angle within the ranges 60° to the right and 45° to the left. Maximum cutting efficiency is now maintained thanks to the possibility of setting optimum saw band speed by a frequency converter in the range between 15 and 90 m/min., which significantly contributes to cutting speed, accuracy and longer service life of saw bands. Large base and massive arm turning system with large loading surfaces ensure exceptional stability of the machine even when cutting heavy workpieces.

- Robust machine framework consisting of castings from grey cast iron ensures vibration absorption.
- Modern concept of the band saw arm allows for large cutting ranges in upright and angular cuts.
- The turntable rotates along with the saw band. Thanks to that the saw band does not cut into the loading surface of the vice.
- Simple locking and adjusting of the desired cutting angle on the angle scale with stops fixed at 60° to the right and 45° to the left.
- Massive quick-clamping vice ensures easy and reliable material clamping.
- Large diameter running wheels and precise three-side hard-metal guiding ensure long service life of the band and cutting accuracy.
- Overdesign of running wheel bearings, tensioning wheel system and all rotary parts ensures long service life of the machine.
- Noiseless and maintenance-free band drive is provided by an industrial electric motor with worm gearbox.
- The machine is connected to a complete cooling system with a high-performance pump and possibility of regulating the flow on both guiding heads independently. Coolant tank with a pump is placed in the base of the machine.
- Easy control by ergonomically placed controls (electrical and hydraulics) on the base of the machine.
- The machine is equipped with a hinged stop with a 500mm scale. Hinged system prevents the workpiece from jamming during cutting.

PHOTOGALLERY







DR250/300/330*

Workpiece stop - Standard equipment

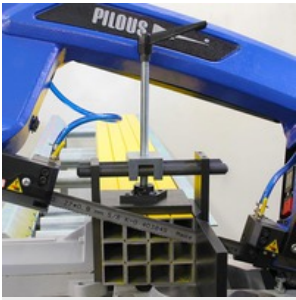
Robust stop with a 500mm scale for setting the required length of the material to be cut.



FR*

Frequency converter - Standard equipment

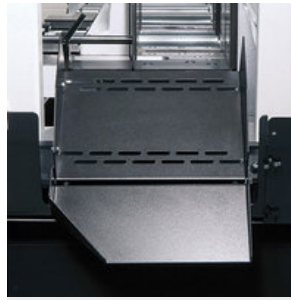
Enables continuous blade speed regulation between 15–90 m/min. and thus setting the optimum cutting conditions for the given material.



VP

Pressure device

Used to clamp the bundles of material to be cut. Ensures simple and reliable material clamping using a vertical contact pressure.



KL

Material chute

Continuously joins the vice behind the cut and allows for easy slide of cut pieces into a container when cutting larger series. The chute construction consisting of 2 parts prevents leakage of the coolant.



LA 50

Halogen lamp

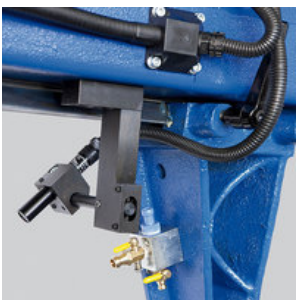
Provides good lighting of the workplace of the machine. An invaluable tool especially when the lighting at the workplace is insufficient.



MM

Oil mist lubrication

Creates an oil mist that is sprayed onto the cutting edge. It replaces the use of a classic coolant, especially when cutting sections during which leakages may occur. Possibility of using organic oils.



LS

Laser alignment

High-quality industrial laser projects the cutting line on the material to be cut. Makes the setting of the required material length simpler, faster and more accurate.



KDM

Cleaning brush

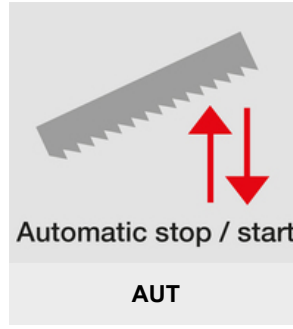
Steel cleaning brush, driven by driving wheel. Used to remove chips from the saw band behind the cut.



CD

Saw band tension indicator

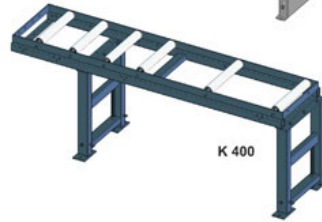
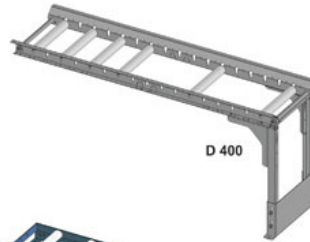
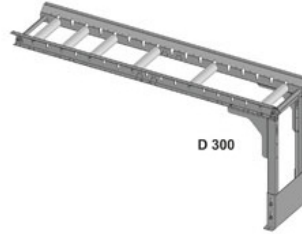
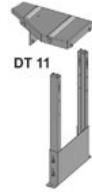
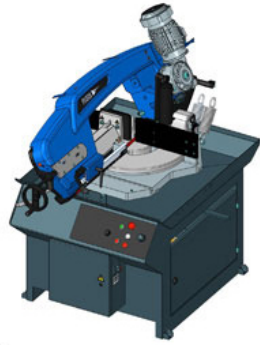
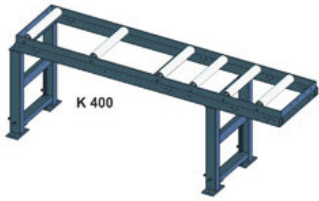
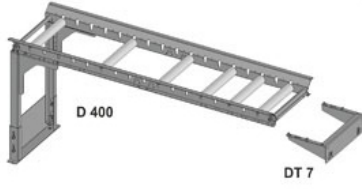
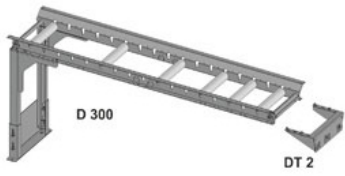
Ensures accurate tensioning of the saw band to a required value according to the pressure gauge and its control during the use of the machine. Optimum tensioning of the saw band is essential for its service life and cutting accuracy.



Auto-start descent of the arm

In standard machines, the control valve of the arm descent has to be shut after the arm uplift and by the next arm descent, the descent speed has to be set again. In this version, the control valve is additionally fitted with an electro-hydraulic valve, which remains after the arm uplift in the set position. After saw blade start, it is automatically released and the arm descends into the cut at a set speed. Thus, setting of the descent speed for each cut falls off. This significantly eliminates operator error and thus protects the saw blades, and increases also productivity of the machine. An ideal help when cutting material in larger series.

CONVEYORS





- Original bandsaw blades produced using the latest technology with top-quality German materials, while strictly complying with all stated production and control procedures.
- High productivity and precision of cut with the maximum service life of the blade is ensured.
- Wide range of produced types of sawblades and tooling enables the professional cutting of almost all available materials.

Bi-metal blade
Consists of bearing band from special steel on which a layer of HSS material is welded into where the teeth are milled.

Constant tooth spacing
The distance of the teeth are always the same.

Variable tooth spacing
The distance of teeth vary and is periodically repeated. This results in a greater cutting range, ability to further eliminate vibrations caused by the impact of the tooth blade on material, longer service life of the blade.

M42

Universal blade recommended for a wide palette of material, including tool steels and stainless steel up to hardness 45 HRC. Teeth are made from steel HSS-M42 containing cobalt.

M51

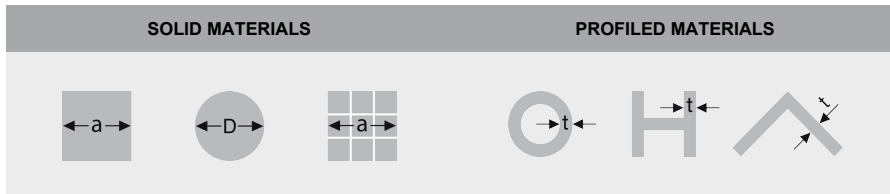
Blade for tool and stainless steel with hardness up to 50 HRC. Tooth tips are made from steel HSS-M42 containing cobalt and wolfram

Carbide

Consists of bearing band from special steel into which the teeth are milled on which especially grinded carbide plates are welded. The carbide mounted blade is recommended for cutting surface hardened materials, chrome parts, forged pieces and materials with external tenacity and hardness up to 62 HRC.

Cutting range

For optimal output of the blade, the correct selection of the size of the blade tooth is important depending on the size of the divided material.



Variable tooth spacing		Constant tooth spacing		Variable tooth spacing		Constant tooth spacing	
a(D) [mm]		a(D) [mm]		t [mm]		t [mm]	
0-25	10/14	0-10	18	0-4	10/14	0-1	18
20-40	8/12 (8/11)	5-20	14	3-6	8/12 (8/11)	0-3	14
30-60	6/10	20-40	10	6-9	6/10	4-7	10
40-70	5/8 (5/7)	40-80	6	9-13	5/8 (5/7)	8-11	6
60-110	4/6	80-120	4	12-16	4/6	12-15	4
80-140	3/4	120-200	3	16-22	3/4	16-20	3
120-350	2/3	200-400	2	20-35	2/3	21-30	2
250-550	1,4-2	300-800	1,25	30-85	1,4-2	31-90	1,25
380-750	1/1,5			40-85	1/1,5		
550-3000	0,75/1,25			80-200	0,75-1,25		

When selecting the number of teeth for the blade, the general principle applies of a minimum of 4 teeth, but no more than 30 teeth are in contact with the work piece.

Be careful when unpacking welded saw blades. They are in a shipping container in tensioned condition. Remove the saw blade cover only after fitting it onto the machine.

EMULSION



COOLcut Standard

COOLcut Standard – universal coolant and lubricant.

Recommended concentration 5–10 %. 5 litres pack. Dilution 1:20.

- fluid allows achievement of optimal lubricating and cooling properties during the machining process
- low aromatic, highly refined paraffinic oil
- effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
- bio stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
- minimum tendency to foaming ensures effective lubrication
- high efficiency and profitability of use

Except use on log band saws the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.



COOLcut Opti

COOLcut Opti – universal coolant and lubricant. Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process.

Recommended concentration 4–7 %. 1 and 5 litres pack. Dilution 1:20.

- low aromatic, highly refined mineral oil
- effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
- above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
- minimum tendency to foaming ensures effective lubrication
- high efficiency and profitability of use
- long-term biostability

In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.



COOLcut Eco 65

COOLcut Eco 65 – universal cooling and lubricating emulsifying oil, well biodegradable according to OECD 301-D test. Biodegradability of 65 % in 21 days.

Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.

- Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process
- highly refined synthetic ester oil
- effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
- above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
- minimum tendency to foaming ensures effective lubrication
- high efficiency and profitability of use
- long-term biostability

In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.



COOLcut Bio 90

COOLcut Bio 90 – universal cooling and lubricating emulsifying oil, well biodegradable according to OECD 301-D test. Biodegradability of 90 % in 21 days. Due to its biodegradability it can be used in any outdoor environment without environmental damage.

Recommended concentration 4–7 %. 5 litres pack. Dilution 1:20.

- Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process
- highly refined synthetic ester oil
- effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
- above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
- minimum tendency to foaming ensures effective lubrication
- high efficiency and profitability of use
- long-term biostability

In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres.



COOLcut Micro

COOLcut Micro – an easily biodegradable semi-synthetic cooling and lubricating micro-emulsion. Due to its biodegradability it can be used in any outdoor environment without environmental damage. Such machining fluid allows achievement of unique lubricating and cooling properties during the machining process.

Pack of 5 litres. Use undiluted.

- highly refined synthetic ester oil
- effective corrosion inhibitors provide permanent protection of the workpiece and the machine from corrosion
- above average stability and excellent wettability ensure excellent cooling and lubricating effect even in very hard water
- minimum tendency to foaming ensures effective lubrication
- high efficiency and profitability of use
- long-term biostability

In addition to use in saw bands the product is designed for machining operations carried out both on conventional machines and NC and CNC machining centres. 5 litres pack.



COOLcut Antifreeze

COOLcut Antifreeze – low-freezing ingredient for water miscible coolants used in winter in outdoors environment, up to minus 20 °C, depending on the dosage.

5 litres pack. Dilution 1:20.

- effectively lowers the freezing point of the fluid
- very good resistance to oxidation guarantees long service life
- does not act aggressively on the sealing elements (elastomers), to which it comes into contact.

Optima Antifreeze	(%)	10	20	30	40	50
Flowability temperature	(°C)	-5	-10	-17	-26	-40

RECOMMEND



OH 90

Simple and very fast deburring of all kinds of sections (including the internal edges) or full material by a rotary steel brush. High quality construction of the machine along with a three-phase motor make use of the machine possible in specialized workshops as well as in production plants. Compared to manual deburring it reduces the required time and hence reduces your costs. While maintaining incomparably higher and balanced quality of deburring.

We recommend using stainless steel brush for stainless steel products.
Example of the difference between manual deburring (including internal edges) and OH 90

Hollow section 60 x 60 x 2 mm:	manual deburring - 32 s	machine OH 90 - 8 s
Tube diameter 50 x 2 mm:	manual deburring - 21 s	machine OH 90 - 4 s



OHE 90

Simple and very fast deburring of all kinds of sections (including the internal edges) or full material by a rotary steel brush. High quality construction of the machine along with a three-phase motor make use of the machine possible in specialized workshops as well as in production plants. Compared to manual deburring it reduces the required time and hence reduces your costs. While maintaining incomparably higher and balanced quality of deburring.

We recommend using stainless steel brush for stainless steel products.
Example of the difference between manual deburring (including internal edges) and OH 90

Hollow section 60 x 60 x 2 mm:	manual deburring - 32 s	machine OH 90 - 8 s
Tube diameter 50 x 2 mm:	manual deburring - 21 s	machine OH 90 - 4 s